

# SCR

VEHICLE PERFORMANCE PROGRAMMER



## USER MANUAL

READ ALL SAFETY WARNINGS AND CAUTIONS PRIOR TO USING THIS PRODUCT

**Superchips**

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**S A F E T Y   W A R N I N G   &   C A U T I O N**

Throughout this User Guide (hereafter noted as User Manual or Manual) you will see important messages regarding your safety or the protection of your vehicle. These messages are designated by the words WARNING or CAUTION.

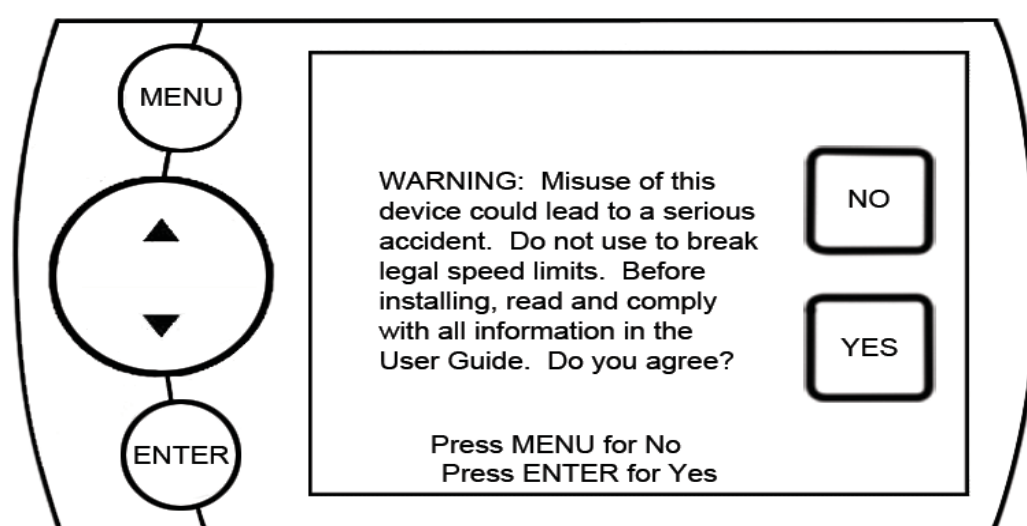


***WARNING indicates a condition that may cause serious injury or death to you, your passengers or others nearby. Pay careful attention to these Warning messages, and always comply with them. They could save a life.***

***CAUTION indicates a condition that could cause damage to your vehicle. It is important to install and operate your Superchips product in conformance with instructions in this Manual. Cautions alert you to particularly important things that will keep your vehicle operating properly.***

This Superchips Product is a high-performance product. As such, it does present some risks of which you should be fully aware. Do not use this product until you have carefully read the following safety information and the Owner Agreement.

***NOTE: After the device has been installed, the screen and logo will appear followed by a warning and compliance directive. To indicate you accept and acknowledge the warning and compliance, press the [ENTER] or [YES] button.***



**S A F E T Y   G U I D E L I N E S**

1. Do not exceed legal speed limits on public roadways. Use any enhanced speed capabilities of this product only in closed circuit, legally sanctioned racing environments expressly for this purpose. Loss of control from speeding on a public road could seriously injure you, your passengers, or others on the roadway.
2. Do not operate the device while driving. Perform all adjustments or changes while stopped. Changing a setting while driving can interfere with your attention to roadway conditions.
3. “Stacking” performance-enhancing devices or other improper installation can cause power train failure on the road. Other products may have features incompatible with your device. Follow all installation and operating instructions, and do not stack products.
4. Some modifications may affect other parts of your vehicle. For example, if you remove/adjust the speed limiter in your vehicle, be sure your tires and other components are rated for the increased speeds they will have to withstand. Not doing so can lead to loss of vehicle control. Modify the speed limiter only for use in closed circuit, legally sanctioned racing environments, not for use on public roadways.

**WARNING**

***Misapplication or misuse of this product could lead to a serious or fatal accident. Comply with all safety information in this manual, and your vehicle owner’s manual. Follow safety, installation and operating instructions in this User Manual to assure proper use.***

## LIMITED 1 YEAR WARRANTY

### LIMITED 1 YEAR WARRANTY

- Superchips, (hereafter “SELLER”) gives Limited Warranty as to description, quality, merchantability, fitness for any product’s purpose, productiveness, or any other matter of SELLER’s product sold herewith. The SELLER shall be in no way responsible for the product’s open use and service and the BUYER hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by SELLER and BUYER.
- The Warranty is Limited to one (1) year from the date of sale and limited solely to the parts contained within the product’s kit. All products that are in question of Warranty must be returned shipping prepaid to the SELLER and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by Superchips.
- Under no circumstances shall the SELLER be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.
- If the BUYER sends back a failed unit that is out of warranty and chooses to buy a refurbished unit, the refurbished unit will only carry a 90 day warranty. If the BUYER purchases a new unit at a predetermined discounted rate, it will have the standard 1 year warranty.
- Under no circumstances will the SELLER be liable for any damage or expenses insured by reason of the use or sale of any such equipment.
- THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.
- IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT, THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.
- ***NOTE: This warranty is void for any new products purchased through auction web sites. Warranty is valid only for new products purchased through Authorized Dealers (proof of purchase required for all warranty claims).***

## VEHICLE WARRANTIES

### IMPORTANT INFORMATION

- Many of our customers ask, “Will your product void my vehicle’s manufacturer’s warranty?” While the answer is straightforward from a legal standpoint, it’s important to educate our customers (and all aftermarket consumers) on some industry realities and offer some common sense precautions to minimize your risk. Superchips is committed to providing quality products that are safe to use. Our products do not cause damage to a vehicle when used as intended.
- Consumers of aftermarket products are protected by the Federal Magnusson-Moss Warranty Act. The Act states that if something breaks on your vehicle and you take it in for warranty repair, the dealer must honor your warranty unless whatever modifications you have added to your vehicle actually caused the problem in question.
- However, the reality is that many dealerships have been known to void warranties on vehicles that use aftermarket products as a matter of policy. This applies in particular to those aftermarket products that produce horsepower, such as performance enhancement “chips,” modified intake manifolds, or aftermarket exhaust systems, regardless of product brand.
- You have strong legal protection as a consumer in regard to your vehicle’s warranty.



However, Superchips strongly recommends you always disconnect and remove your module/programmer and monitor when you take your vehicle to a dealer for warranty work. In addition, leaving the product connected may affect dealer diagnostic analysis and scan tool functions. Superchips makes every effort to produce product that can be easily removed.

- ***NOTE: Even if you disconnect your device, your dealer can detect the use of any programmer—even if the device has been removed.***

## **SERVICE CENTER AND COMPATIBILITY CAUTIONS**

- **CAUTION: RETURN YOUR VEHICLE TO STOCK BEFORE TAKING IT TO A SERVICE CENTER.** All Superchips modules and programmers are built to operate with OEM calibrations. If you take your vehicle to a service center they may, by your request or otherwise, update your vehicle's calibrations. If this happens and your vehicle has not been returned to stock your device will no longer be capable of programming your vehicle. Superchips updates its active products (i.e. those currently being manufactured) to work effectively with updated OEM calibrations. However, this process can take some time as Superchips is not always made aware of calibration changes made by the OEM. In the case of discontinued products, Superchips cannot ensure that your unit will work effectively if you take your vehicle to a dealership and you are given, by your request or otherwise, a new calibration.

- ***CAUTION: If you have used another tuner/programmer on your vehicle, you will need to program the vehicle back to stock and remove the device before using this product. Failure to return to stock may result in PCM failure or engine damage. Programming your vehicle may expose existing defects in the vehicle's PCM that could disable your vehicle. It is advised that you do not program your vehicle in remote locations in case of vehicle failure.***

- ***CAUTION: The SCR programmer was developed on stock vehicles with no after-market bolt-on parts; as such, the performance changes implemented by the SCR may not be compatible with certain aftermarket power add-ons. See below for a brief explanation of how the SCR tuning may be affected by certain aftermarket devices.***

## **COLD AIR INTAKE (CAI) KITS**

There are currently a large number of CAI kits on the market. These kits are designed to improve air flow and temperature. Some of these kits may be compatible with the SCR programmer; however others may cause a lean condition when used in conjunction with the SCR tuning.

## **MECHANICAL MODIFICATIONS**

Mechanical modifications such as headers, upgraded camshafts, displacement changes, cylinder head improvements etc. will change the airflow characteristics of an internal combustion engine. This may cause the tuning to be incompatible with the SCR tuning.

## **FORCED INDUCTION (TURBOCHARGERS OR SUPERCHARGERS)**

Turbochargers and Superchargers drastically change the dynamics/performance of the engine, and its fueling/timing needs. Additional hard parts and custom tuning are required to run a forced induction system on an engine that was originally designed as a Naturally Aspirated (NA) engine.

## PRODUCT REGISTRATION

### ***BENEFITS OF PRODUCT REGISTRATION***

**-Your Safety** - Registering your product allows us to know exactly which product you have and provide important product updates to you that improve the quality and/or safety of the product.

**-Enhanced Features** - All Superchips products are easily updated via the internet. We are constantly adding new features and improvements to our product that we know you will want to enjoy.

**-Confirmation of Ownership** - Provides a record in case of product loss, theft, or required warranty work. When you call us for support our team will already have much of the information they need to help you.

**-Improved Product Development** - Helps us better understand you (our customers) and design products that meet your needs.

**-Special Offers** - Allows us to inform you about special offers on accessories and/or new products that fit your vehicle and enhance your driving experience.

## CARB/EPA COMPLIANCE

***NOTE: The stickers included in some products apply to products that have received CARB certification for emissions compliance.***

This product meets the emissions compliance requirements of the California Air Resources Board and Federal Environmental Protection Agency and is legal for sale and use on pollution-controlled vehicles operated on public streets and highways. It must be installed and operated according to the instructions provided in this user's manual. Included with this product is a sticker like the one pictured for you to keep in your vehicle. You can either apply it somewhere on the vehicle (e.g., the inside end of driver's door) or simply store it in your glove box. The purpose of these stickers is to inform anyone who may have questions regarding the use of your Superchips product and how it affects emissions. For example, it would be something to show an emissions technician if questioned when taking your vehicle in for an emissions check to let him/her know the product is CARB emissions compliant.

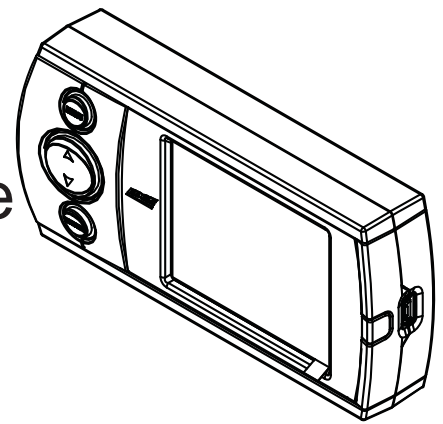




## PARTS INCLUDED

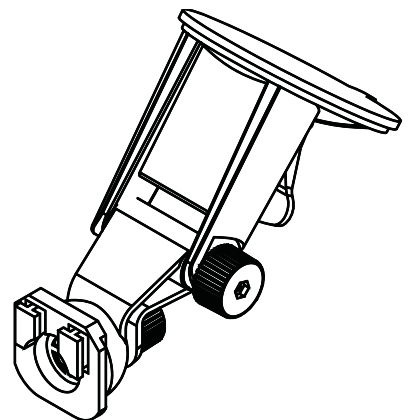
### SCR DEVICE

The SCR device provides you with an interface to change the performance programming of your vehicle and display multiple vehicle parameters in real time.



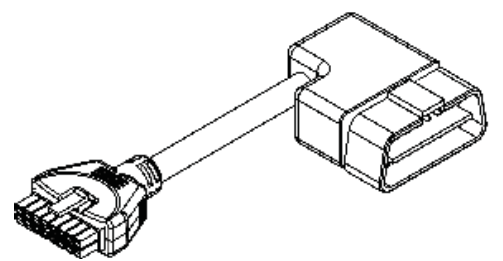
### WINDSHIELD MOUNT

The mount supplied with your kit is designed to give you flexibility in mounting your device anywhere on your windshield. It is equipped with a locking suction cup, a vertically adjustable arm, and a 180° pivot head which allows you to fine tune the viewing angle.



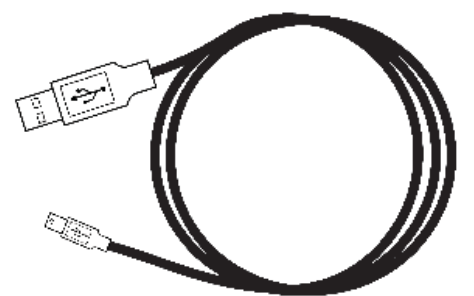
### OBDII CABLE

The purpose of this cable is to provide a communication link between your vehicle and your device as well as power.



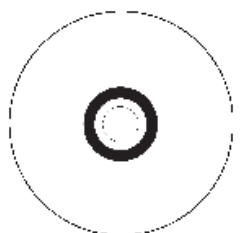
### MINI USB CABLE

The USB cable is used to connect your device to your PC in order to perform firmware and calibration updates using the Fusion software.



### COMPACT DISC (CD)

The compact disc contains the Fusion software for easy internet updates, and the MyStyle™ Software for customizing your display screen, datalogging, and managing your EAS devices.



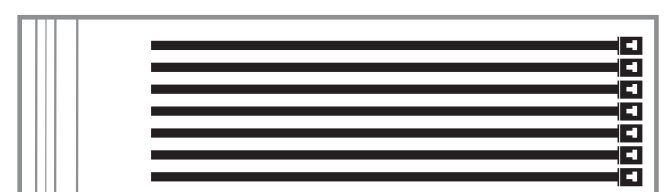
### ALCOHOL PAD

The alcohol pad is supplied for cleaning the windshield prior to mounting the suction cup mount.



### ZIP-TIES

Use these zip-ties to fasten the OBDII cable under the dash, and away from moving parts such as foot pedals.



## SCREEN LAYOUTS &amp; FUNCTIONALITY

DIGITAL GAUGES

## 8 Gauge Layout



## 6 Gauge



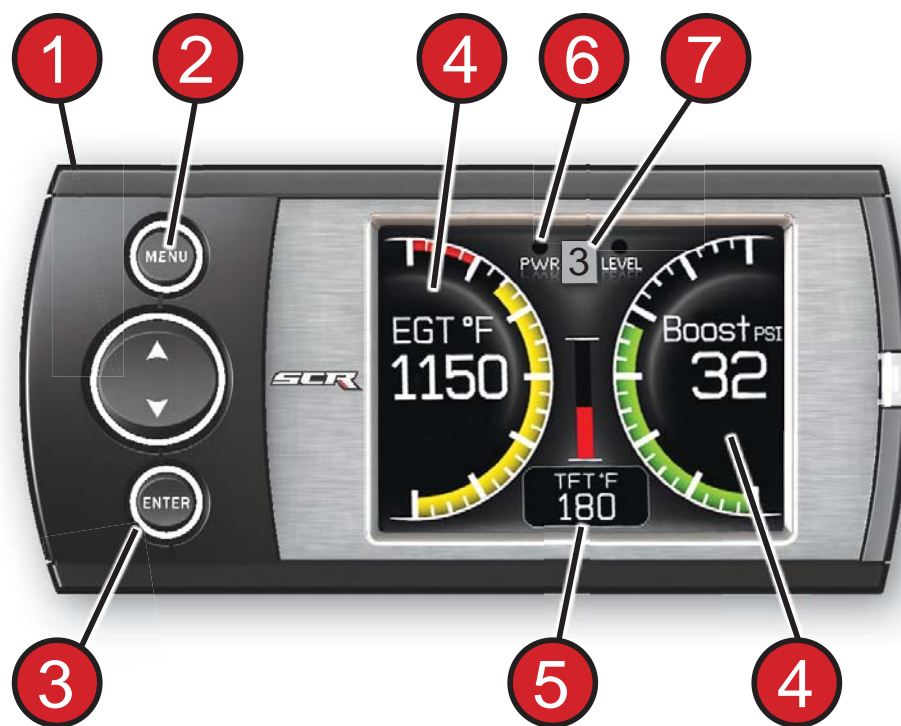
## 4 Gauge




## 2 Gauge



5

ANALOG GAUGES

1. **The Up/Down Arrow Buttons** are used to select the menu items and increase or decrease values.
2. **The Menu Button** gives you access to the main menu or can be used to exit out of a menu screen.
3. **The Enter Button**, if pressed, directs you to the PID Menu where you are able to modify what each gauge displays.
4. **Analog Gauges** display vehicle Parameter IDs (PIDs)
5. **Digital Gauges** display vehicle Parameter IDs (PIDs)
6. **The Alert Indicator light** will illuminate (red) when an alert limit is exceeded. If the light is blue and contains a wrench  your Maintenance Manager is letting you know a maintenance item is ready to be serviced.
7. **The Power Level Indicator** represents the current power level. 0 represents stock.

## GETTING STARTED

### VEHICLE PARAMETER ID's (PIDs)

To change what PID each gauge displays, follow these steps:

#### STEP 1 - PRESS ENTER



#### STEP 2 - CHOOSE THE GAUGE TO MODIFY, THEN PRESS ENTER



#### STEP 3 - SELECT A NEW PID FROM THE PROVIDED LIST



**STEP 4 - SET THE ALERT VALUES ACCORDINGLY. (FOR MORE INFORMATION ON ALERT SETTINGS, PLEASE REFER TO THE ALERT OPTIONS (SETTINGS) SECTION)**

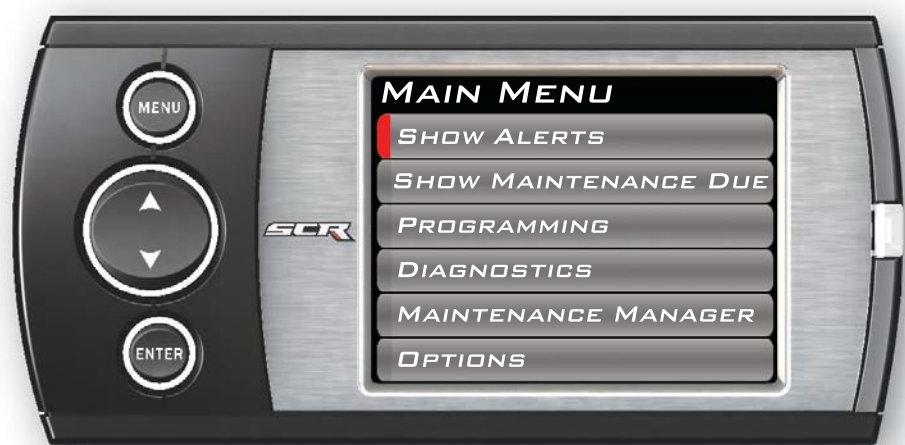
**STEP 5 - CHOOSE A GAUGE COLOR. (COLORS CAN ONLY BE MODIFIED ON ANALOG STYLE GAUGES)**

**STEP 6 - VIEW PID INFORMATION TO UNDERSTAND WHAT THE PID IS AND/OR WHAT IT MONITORS**

**STEP 7 - WHEN YOU ARE FINISHED, EXIT THE MENU**



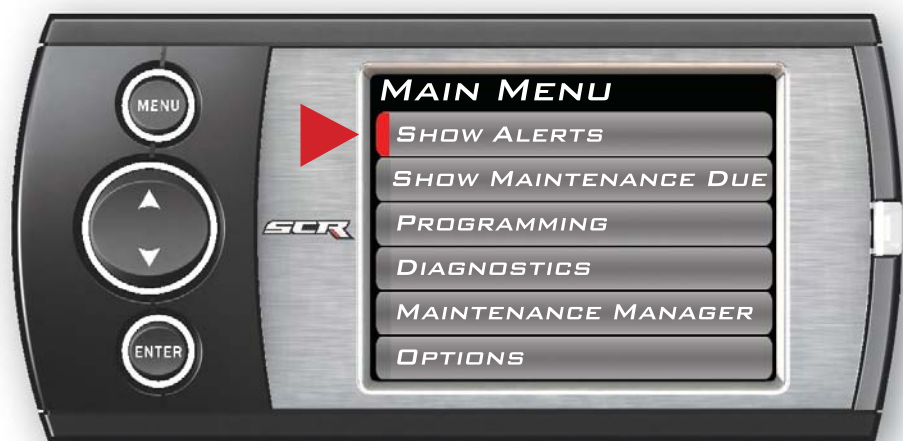
## NAVIGATING THE MAIN MENU



**NOTE:** The following will only show under certain circumstances:

1. “Show Alerts” will only show if an alert is active.
2. “Show Maintenance Due” will only show if your Maintenance Manager is turned on and a maintenance item is due.

### SHOW ALERTS



If this option is displayed in the MAIN MENU, the SCR device is alerting you that one or more of the PARAMETER IDs (PIDs) being displayed is outside the values you specified. There are two methods in which the alerts are viewed:

#### MAIN SCREEN METHOD

While viewing the gauges, two things will automatically occur:

1. The alert notification will

sound (only if the sound is turned on for that specific PID). The sound will turn off after a few seconds depending on the sound duration you have set.

2. The gauge value will flash red. It will continue flashing as long as the parameter is outside the user-defined value.

#### ALERTS SCREEN METHOD



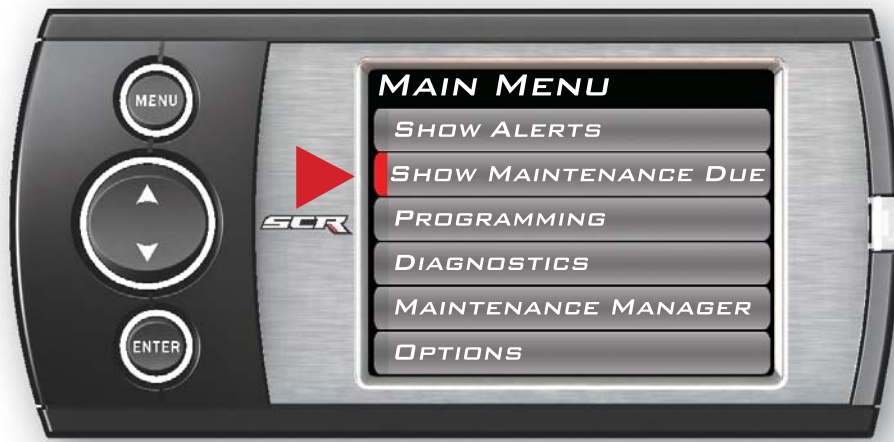
The Alerts screen will show all parameters for which an alert has been

set. If an alert value is outside the user-defined setting, it will flash red. The Alerts screen will stay in view for a minimum of three seconds, until no alert condition exists, or until the MENU button is pressed, at which point it will return to the main gauge screen.

If you have exited the Alerts Screen you can return to the screen by entering the **Main Menu** and selecting **Show Alerts**.

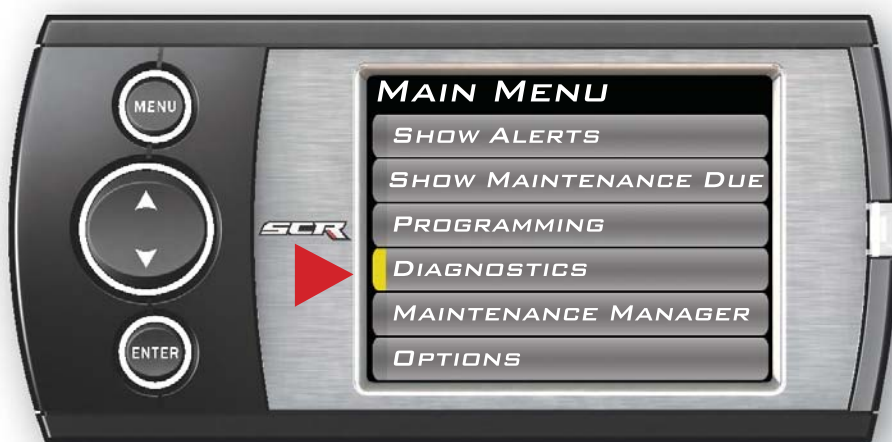
**NOTE:** For more information on how to set the Alerts, Refer to the: **ALERT SETTINGS** section of this manual.

## SHOW MAINTENANCE DUE



This feature allows you to quickly view which Maintenance Item is up for service. Refer to the **Maintenance Manager** section of this manual for more information.

## DIAGNOSTICS



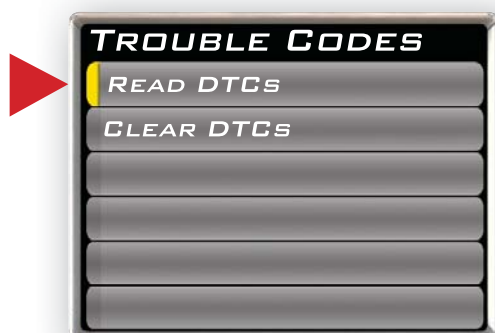
### --TROUBLE CODES--



When your PCM detects a problem with your vehicle it sets a trouble

code. Use this menu item to retrieve the code, and to clear it after retrieval.

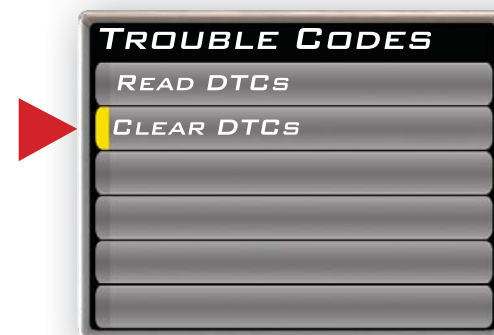
### ---READ DTCs---



If you want to read the DTCs on your vehicle follow these instructions:

1. Make sure the Key is in the **ON position**.
2. Select the **Trouble Codes** from the **Diagnostics** menu.
3. Select **Read DTCs** from the menu.

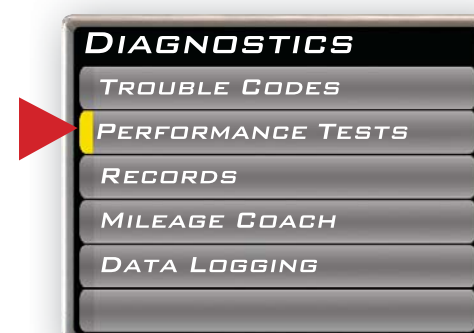
### ---CLEAR DTCs---



After you have retrieved the trouble codes and written them down,

you can clear the trouble codes by selecting **Clear DTCs** from the menu. This will erase any of the codes currently set. If the codes come back we recommend you see a qualified mechanic who can accurately diagnose/repair the problem.

### --PERFORMANCE TESTS--



Performance tests can be helpful for measuring performance

gains after vehicle modifications ( e.g. intake, exhaust, programmers, etc).



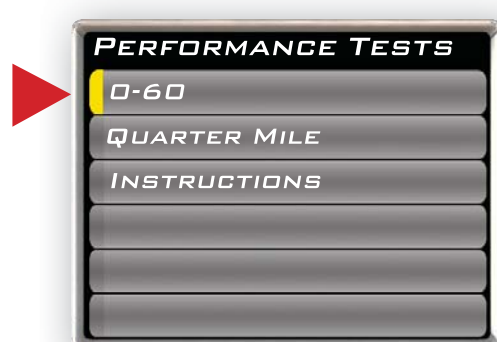
**WARNING: Do not use the Performance Tests feature to break any traffic laws.**

The CSR device allows you to test the performance of your vehicle by timing 0-60 and

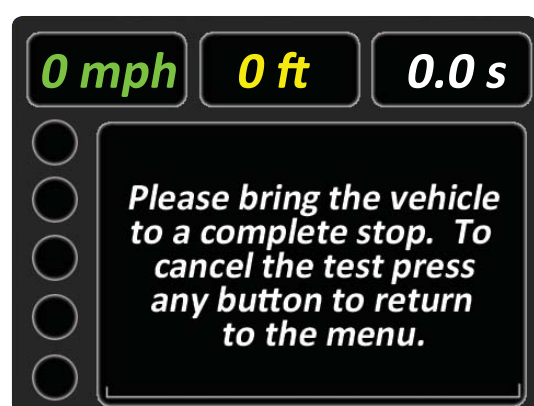


quarter mile runs (instructions are provided in the Instructions menu). The results recorded by the Performance Test features will likely differ from what you'll see on a drag-strip or other racing venues. Incorrect speedometer calibration, data sample rate, and tire slippage can cause miscalculations in the displayed results.

## ---0 to 60 MPH TEST---

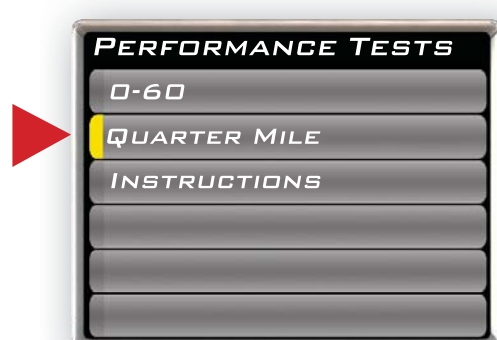


After selecting the 0-60 menu option, the following screen will appear:



After bringing the vehicle to a stop, follow the directions noted on the screen.

## ---QUARTER MILE TEST---

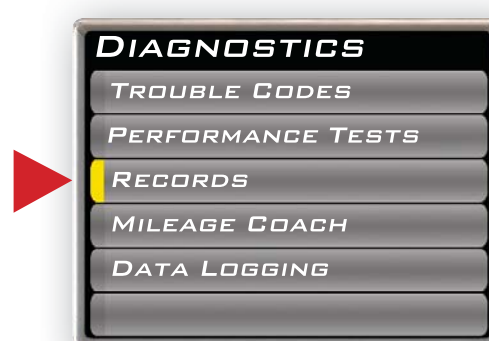


Select the **Quarter Mile** menu item and Figure 10 will appear.

After bringing the vehicle to a stop, follow the directions noted

on the screen. The Quarter mile test will prompt you with a drag strip style light tree. If you watch the circles on the left they will light up yellow, then green. If you go before green appears then a red light will light up in the bottom showing that you started too early. If you don't start early then you will see a green light remain in the bottom circle. When you've finished the quarter mile run the device will display the ending mph, the distance traveled in ft., and the elapsed time it took to reach 1/4 mile. In addition it will graph your Distance vs Speed so you can better analyze the run.

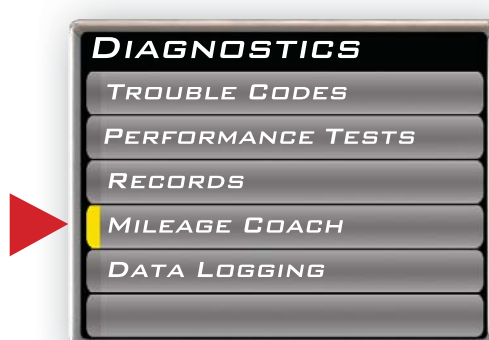
## --RECORDS--



Records contain certain parameters for later review. This is useful

on the drag strip, or when you are trying to trouble shoot a problem.

## --MILEAGE COACH--



The Mileage Coach feature provides useful tips and tools that help

you learn ways to improve your fuel mileage.



There are 3 PID options that directly relate to the Mileage Coach feature. They are:

## Mileage Average

This PID displays the calculated average MPG or L/100km and is updated continuously while driving.

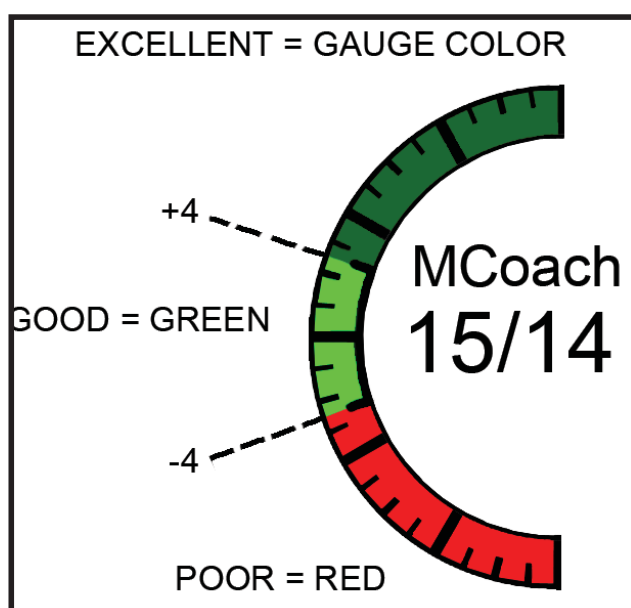
***NOTE: The average is calculated only when the PID is being displayed on the Main Gauge Screen.***

This value will typically change more during start/stop driving, and less on the highway.

**Mileage Instantaneous** This PID shows a conscientious driver how to vary the pressure on the gas pedal to save fuel every second. The value is displayed in either MPG or L/100km.

## Mileage Coach

This PID takes the Average and Instantaneous values mentioned above and creates a visual tool to help maximize your fuel economy.



This PID is best viewed using one of the Analog Gauge locations. The level

indicator has been separated into 3 colors. The Green color in the middle indicates that your driving habits are producing good fuel economy. The Red indicates that your driving habits are not producing the best fuel economy and that there is room to improve. The upper "Gauge Color" (depends on the color you chose in the PID properties) indicates that your driving habits have been maximized, and you are getting the most out of your fuel.

***NOTE: For instruction on how to display the Mileage Coach IDs, refer to the Getting Started section of this manual.***

## MILEAGE COACH SETUP

1. Enter the MAIN MENU, select DIAGNOSTICS, then select MILEAGE COACH. The following screen will be displayed:



2. Become familiar with each option within the Mileage Coach feature set and adjust values accordingly. Refer to the follow explanations for each of the options available.

## ---CLEAR FUEL AVERAGE---



Use this option to clear the calculated average displayed in the Mileage Average PID.

## ---LAST FUEL ECONOMY---



This option allows you to enter your actual Fuel Economy Value. This value is important and should be calculated and entered regularly. This can be manually calculated by dividing the distance travelled by how much fuel you have used (Distance/Fuel = Fuel Economy). Some vehicles have their own Fuel Economy average that is displayed in cab and may be used instead of a manual calculation.

## ---TRIP ODOMETER---



This value is used to calculate the Trip Cost and Fuel Average.

## ---FUEL PRICE---



In order to calculate your Mileage and Trip Costs, the price of fuel purchased must first be entered.

For example: Fuel purchased at \$3.58/Gal should be entered as 3.58.

## ---MILEAGE COST---



This value is a calculated average based on how many miles you have traveled and the Fuel Price you entered.

## ---TRIP COST---



This value is calculated from the Fuel Price and the Trip Odometer.

## ---MILEAGE COACH DISPLAY---



There are two ways to display the Mileage Coach PID.

1. Show Difference: Difference between Instantaneous and Average.
2. Show Values: Displays as Instantaneous | Average.

## ---MILEAGE DRIVING TIPS---

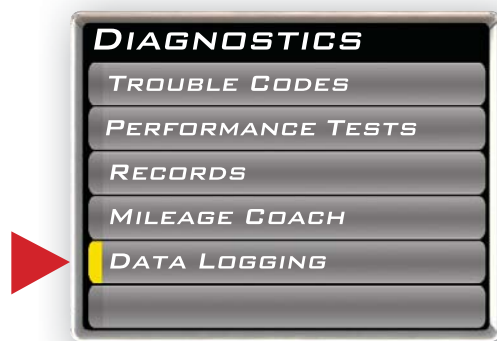


These tips are intended to give you general information regarding driving habits or anything that will help maximize your fuel



economy and overall driving experience.

## --DATA LOGGING--



This feature allows you to record all of the available PID data on

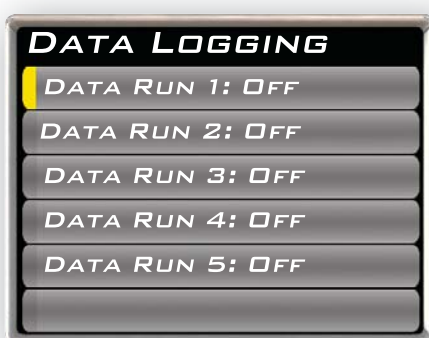
your device, so you can view it at a later time.

**(NOTE: The device also runs background tasks which are also recorded. This information can be ignored.)**

To start the recording:

1. Open the Data Logging menu located under the Diagnostics menu.

The following screen will appear:



2. Choose one of the 5 Data Run options. The data run will turn "On".

**NOTE: Only one data run can be turned on at a time.**

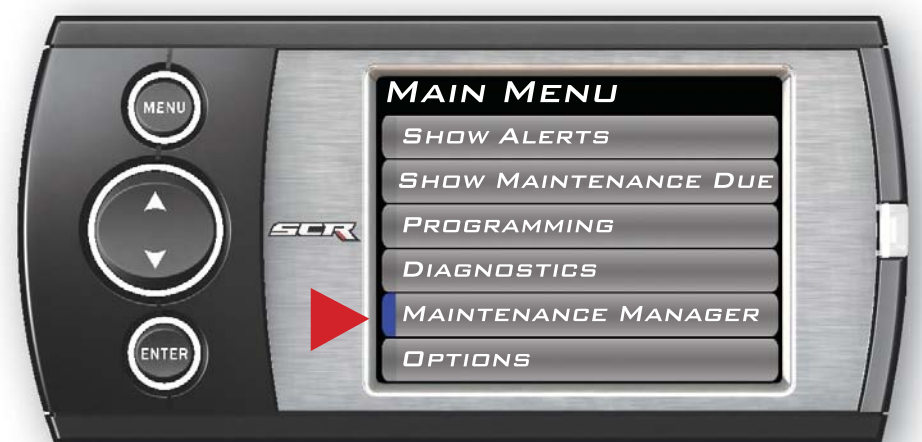
3. Return to the Main Gauge screen. The device is now in recording mode.

4. Once you have recorded for a desired period of time, return to the Data Logging menu, and

choose the same data run as before. (This will turn the data run "Off" and stop the device from recording. The recorded information will be stored for the My Style software to retrieve later on).

**NOTE: If you turn the same Data Run back "On" the previous data will be erased, and a new recording session will begin. If the indicator light is red, there is currently a recorded file associated with that run.**

## MAINTENANCE MANAGER



The Maintenance Manager calculates the odometer value of your vehicle using the vehicle speed and time.

**NOTE: The Maintenance Manager odometer reading may become out of sync with the actual dash odometer reading. You may need to periodically update the Maintenance Manager's odometer value. It is important to note that the SCR only tracks miles traveled when the main gauge screen**



***is being displayed. If you are in the menus while driving, your miles are not calculated.***

## --ODOMETER SETUP--

1. Locate the “Maintenance Manager” by entering the “Main Menu”.

2. Turn “ON” the Maintenance Manager. (If it is turned off, you will not be notified when service is due.)



3. Choose “Odometer” to set your current Odometer reading.



The following screen will appear:



5. Press the Enter button to move to the next Digit.

6. Once all digits have been entered, the Maintenance Manager screen will reappear showing your entered value.

7. Once the Odometer is entered and displayed, chose the “Maintenance Items” option, and refer to the following section.

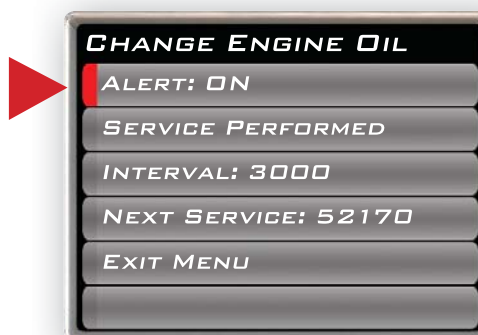


## --MAINTENANCE SETUP--

1. Chose the item you would like to maintain. For demonstration purposes, the “Change Engine Oil” item will be used in this example.



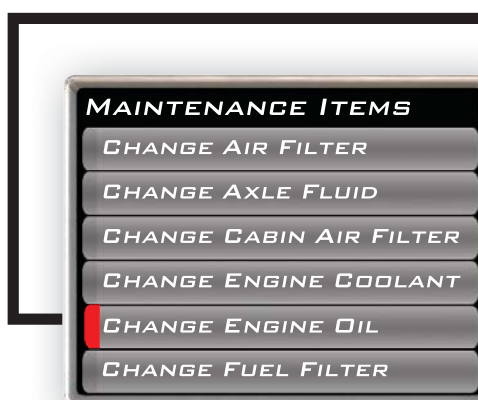
2. Turn the ALERT ON.



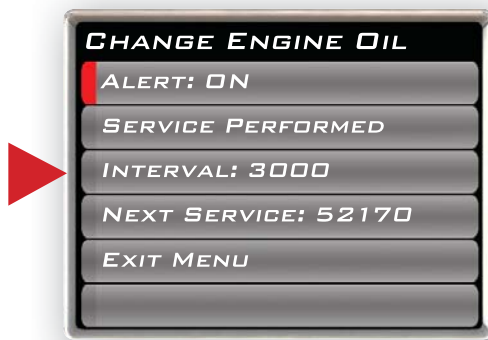
***NOTE: Once a Maintenance Item is turned on, the Alert***

***Status Box to the left of the item will light up. If it is green, the item is***

***not yet due for service. If it is yellow, the item is about to be due and within the specified Alert Threshold. If it is red, the item is due for service. If it remains black, the item is not turned on. This all depends on the following settings.***

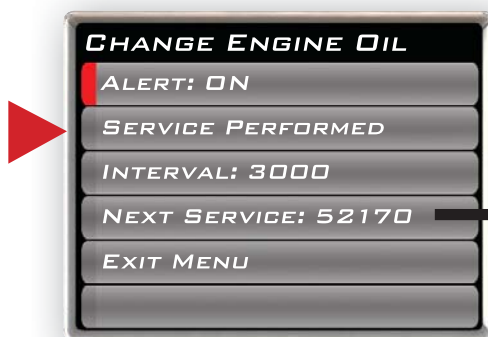


3. Setup the interval value. The 3000 in the example will remind you every 3000 miles to change the engine oil.



**NOTE: Refer to your vehicle user manual to determine what value is recommended for each Maintenance Item.**

4. Select the “Service Performed” option. This will automatically set the “Next Service” value.



**NOTE: Each time your vehicle is serviced, the “Service Performed” option will need to be selected to set the “Next Service” Value.**

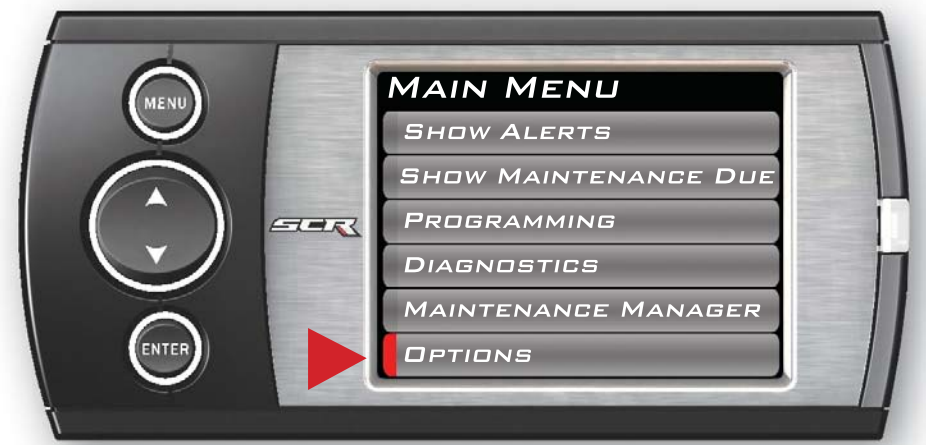
3. The “Exit Menu” option will bring you back to the main gauge screen.

## --ALERT THRESHOLD--



The Alert Threshold value allows you to set how many miles ahead of time you want your Maintenance Manager to alert you that an item is due.

## OPTIONS MENU



The Options menu contains items that will allow you to customize the device settings, as well as change the alert settings to best fit your needs.

## --ALERT OPTIONS (SETTINGS)--

The Alert Options screen allows you to turn the alerts on or



off both collectively and individually. It also lets you set the alert

values for each of the available PIDs.

**To turn alerts on:**

1. Select **Alert Options** from the **Options** menu.

2. Select **Alerts are Off/On** and press enter. This will affect the

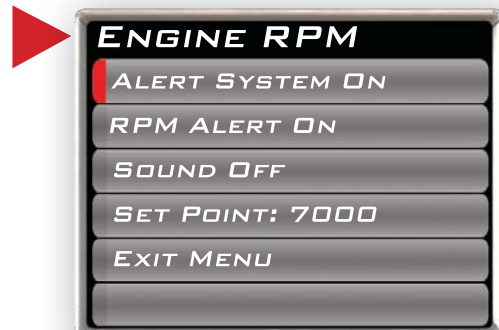


entire alert system as a whole.



**NOTE:** To individually disable or enable an alert, or to change the alert follow these instructions:

1. Select a PID in the Alert Options menu. **NOTE: Engine RPM is being used for this example.**



**NOTE: Engine RPM is being used for this example.**

## ---ALERT SYSTEM OFF/ON---

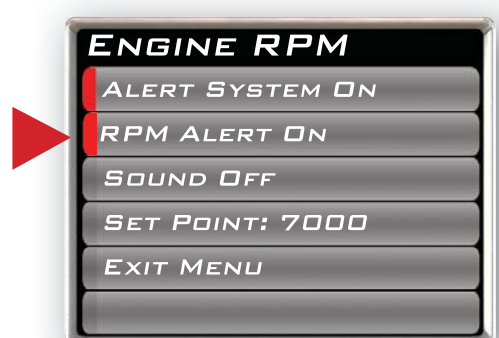
Turns the entire alert system OFF or ON.



OFF or ON. This disables the alerts and sound.

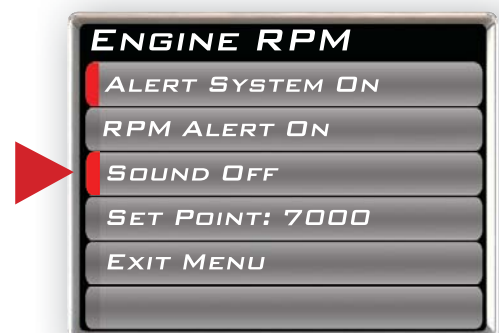
## ---PID ALERT OFF/ON---

This turns OFF or ON the specific PID alert. Any other PID that is turned on, will not be affected, and remain turned on.



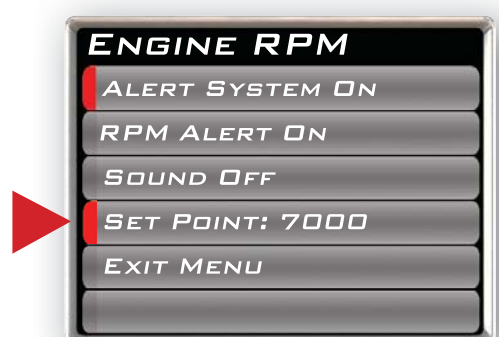
## ---SOUND---

Deals with individual PID alert sounds only.



## ---SET POINT---

This value is used to trigger the alert.



## --SOUND DURATION--



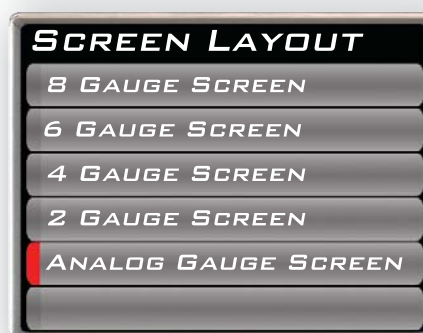
You can adjust the duration of the alert sound by using this menu option.

Simply press the up/down arrow until you have the desired sound length in **seconds**.

## --SCREEN LAYOUT--



The screen Layout menu allows you to choose from five different screen layout options.



The Analog Gauge Screen is set as the default. This gauge option allows you to change the background image. After choosing the Analog Gauge Screen option, you will be asked to toggle through the different backgrounds.



background image. After choosing the Analog Gauge Screen option, you will be asked to toggle through the different backgrounds.

For more information on how to create custom backgrounds, refer to the MyStyle section of this manual.



## --BACKLIGHT AUTODIM--



The SCR device has been equipped with an ambient light sensor.

As it gets darker outside, the device will automatically dim the screen for easier viewing. The Auto Dim feature allows you to set how much the screen will dim.

**NOTE: It's best to make this adjustment at night so you can verify the screen brightness is correct. You'll need to return to the main display screen after setting the Autodim percent in order to see the changes.**

The default is set at 99%. This max setting provides the largest range between the brightness of the screen during the daylight, and the darkness of the screen at night. A 1% setting will provide the same brightness during the day and night.

## --MENU TIME-OUT--



The SCR device has a built in time-out feature.

The purpose of this time-out is to prevent the unit from staying powered up for

excessive amounts of time. If you leave the device in a menu option, and turn off the vehicle, the device will stay in the menu (for 300 seconds by default). After the 300 seconds are up, it will automatically return to the main gauge screen and power off. The same will happen if the device is left in a menu while the vehicle is running or the key is on (it will return to the main gauge screen, but not turn off).

**CAUTION: This function only applies to menu screens. If you are viewing a parameter (PID) adjustment screen, the device will not time out. If you do not exit these screens, the device will not power-off and may discharge the vehicle's battery.**

## --ACCESSORY OPTIONS--



Accessory options allow you to adjust add on features such

as the Expandable Accessories System (EAS). As other accessories are added, additional options will also be added.

## --UNITS--



Changing the unit option allows you to view PIDs in either Metric

or English on the main gauge screen. Vehicle Speed, for example, may be viewed as either MPH or KPH. Temperature PIDs such as Engine Coolant Temperature may be viewed as either Fahrenheit or Celsius.

**CAUTION:** *If you set up your units in either English or Metric, the alert value will be the same for both. If you change from one unit to another, you will need to setup the alert values accordingly. For example, 100 MPH is not the same as 100 KPH.*

## --FACTORY RESET--



If you would like to revert back to the factory default settings, simply select **Factory Reset**

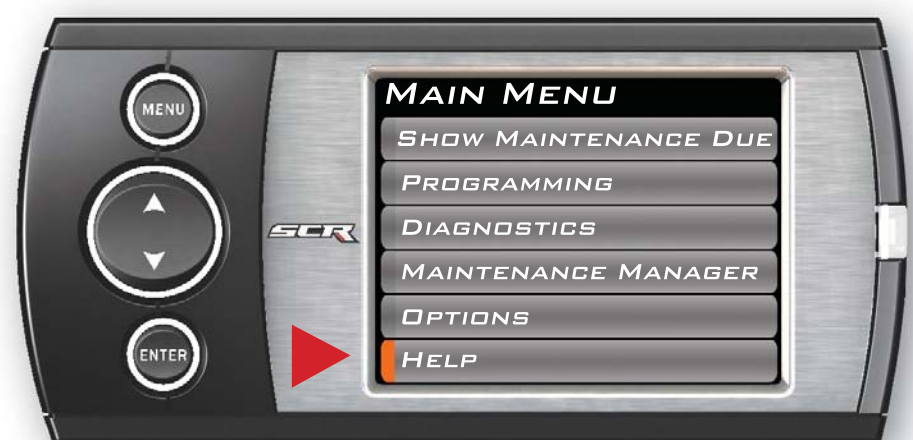
and choose **YES** or press **ENTER**.

Many settings will be returned back to the default setting as they were when the unit was new. Any changes you've made to the alerts, the gauge screen

displays, etc will be returned to the default settings provided by Superchips.

**NOTE:** *Factory Reset will not return the vehicle to stock from a programmed Power Level. See Programming Power Levels section for instructions to return to stock power level.*

## HELP MENU



The Help Menu contains useful information about your device, and the vehicle it is being used on. It also contains Superchips Contact Information, and Technical Support tools.

## --PRODUCT INFO--



The Product Info screen contains five items:

1. Firmware Version
2. Calibration Version
3. Application Version
4. FPGA Version
5. Serial Number

**NOTE: The Serial Number is assigned to your particular device and is used in the software update process by Technical Support.**

Occasionally, Superchips will release updates with improved functionality for both Firmware and Calibrations. Each of these updates are labeled with a number, the number shown in this menu represents the version that is currently on your device.

If you have an EAS device installed on your vehicle and plugged into your device, another Product Info screen will be made available:

1. EAS Firmware Version
2. EAS Serial Number.

## --VEHICLE INFO--



Vehicle Info contains information about your vehicle.

This information will give Superchips Technical Support the specifics of your vehicle.

## --CONTACT INFO--



The Contact Information contains the following:

1. Superchips' web site URL
2. Superchips' address
3. Technical Support's e-mail
4. Technical Support's ph. #

This information will be useful if you need to contact Superchips for warranty claims, sales information, upgrade information or any other technical questions/inquiries.

## --TECHNICAL SUPPORT TOOLS--

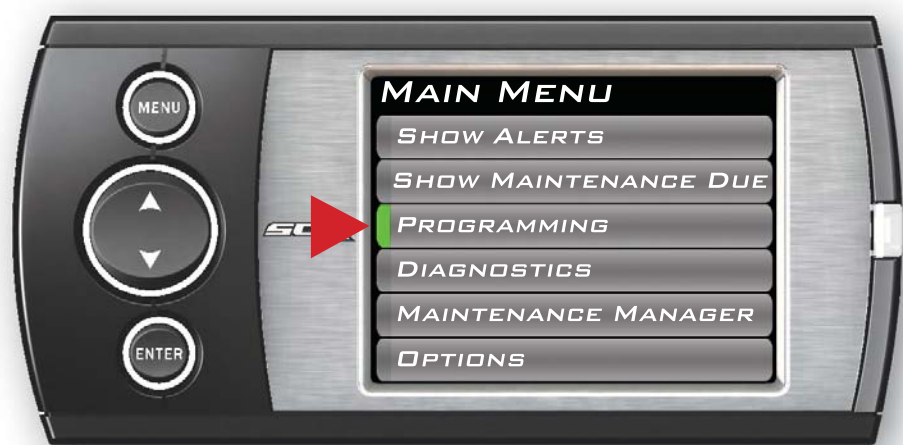


The Technical Support Tools menu contains tools made specifically

to help Superchips' Technical Support representatives help customers when they are experiencing problems with their vehicle or device. This menu should only be used when requested by Superchips Technical Support personnel.



## PROGRAMMING THE VEHICLE



**NOTE:** It is important to unplug all power consuming devices (plugged into the cigarette lighter or power outlets). If you are receiving errors or your display is stuck on the “Uploading bootload-er” screen, refer to the trouble shooting guide at the back of this manual for more information.

### --PROGRAMMING LEVELS--



The SCR device comes ready with power levels that can be programmed into your vehicle's Power Control Module (PCM)

**NOTE:** Some power levels are specific to certain vehicle models. Availability may vary.

**Stock** = This will program your vehicle back to stock.

**Performance** = This program requires the use of 87+ octane gas.

**Extreme** = This program requires 91+ octane gas.

**Race** = This program requires 93+ octane gas.

**Extreme Pulley** = This program is available only for GT500's with a 4lb pulley modification. 91+ Octane gas is required.

### To Program to a Level:

1. Select the power level that best suits your needs.
2. Follow the instructions on the screen.

If you choose to **Create a custom program**, continue to the Custom Options section.

**CAUTION:** Only program while the vehicle is parked and away from traffic, or where the vehicle may impede access or exit. Programming will take several minutes and the vehicle can not be started.

**CAUTION:** Do not combine, or “stack” chips (modules) to gain more horsepower. The chips could be incompatible and result in power-train failure or create dangerous conditions leading to a serious or fatal accident.

**---CUSTOM OPTIONS---**

Custom options allow you to change non-stock parameters.

*\* Options vary based on vehicle type*

**USE CURRENT SETTINGS**

This option will use the previously selected options.

**RESET ALL VALUES**

This option will restore all of the settings back to factory defaults.

**TIRE SIZE**

This option will allow you to select a new tire size if you've changed the factory tires.

**GEAR RATIO**

This option will allow you to select a new gear ratio if you've changed the factory gears.

**AXLE RATIO**

This option will allow you to select a new axle ratio if you've changed the factory axle.

**SPEED LIMITER**

This option will allow you to adjust the factory speed limiter higher or lower than the factory set speed limiter MPH.

**NOTE:** *Removal/adjustment of the factory speed limiter is intended for use at a closed circuit, legally sanctioned racing environment. If this custom option is used for purposes inconsistent with the product's intended function, and violates the product's intended use, the product's warranty is no longer valid. Superchips is not responsible for, or liable for the consequences of improper product use.*



**WARNING:** *If you drive on public roads after removal or adjustment of the speed limiter, you must still obey all driving laws, including adhering to posted speed limits. To drive at racing speeds on public roads seriously endangers you, your passengers, and others nearby. Even if racing in a legally sanctioned racing environment, it is your responsibility to ensure your tires and other vehicle components are rated to travel at increased speeds.*

## CUSTOMIZATION



## USING MYSTYLE

Create and add your own custom backgrounds using the unique MyStyle™ Software. This is included on the CD or can be downloaded from the Superchips website.

**To change the background image:**

1. Press the **Menu Button** to open the main menu.
2. Select the **Options** menu.
3. Select **Screen Layout** under the **Options** menu.
4. Choose the **Analog Gauge Screen** option from the main menu.
5. When the **Analog Gauge screen** displays, you will have the option to choose from 10 different screen backgrounds.
6. **Scroll** through options using the **Up/Down** button and then press the **Enter** button.



## FUSION SOFTWARE UPDATES

**\*\*\*REQUIRES INTERNET CONNECTION\*\*\***

Fusion Software allows the user to update their device to the latest version of firmware and calibration files. This software is included on the CD provided with your device. It can also be downloaded from:

<http://www.superchips.com/>  
or  
<http://www.fusionupdate.com/>

***NOTE: Before you connect your device to your PC be sure to install both the SOFTWARE and the DRIVERS included in the download or on the CD.***

***During the installation you will be prompted to install the drivers...Choose yes.***

### **USING FUSION SOFTWARE**

***CAUTION: The SCR device cannot be plugged into the vehicle's OBDII port and your computer's USB port at the same time.***

***NOTE: Be sure to return your vehicle to stock before connecting the device to Fusion.***

1. **Click the Fusion icon** on your PC desktop.
2. If you have not yet created an account, click on **“Create a New User”**. You will then be directed to a web page to create your login information.

***NOTE: After entering your information, a password will be sent to the e-mail address you provide. Be sure your e-mail account doesn't block e-mails from [www.fusionupdate.com](http://www.fusionupdate.com).***

3. Enter your e-mail address and password on the login screen of the Fusion Software.
4. The computer will prompt you to connect the device using the USB cable. After connecting the device, you'll see a screen pop-up.
5. **Click Yes** to continue with the update.



After you've selected **yes**, the Fusion software will automatically update the device. Once it's completed, you'll see the following screen.



6. **Click OK** and the update will be completed. You'll now have the latest Firmware, and Calibrations on your device. When your device is connected to Fusion, the device model, Lvl, Bootloader, Firmware, Calibration and Serial Number are all displayed at the bottom of the screen. These numbers will be useful to quickly view the state of your device, and whether or not it is currently programmed to a vehicle.

- **MODEL** : The model number for your device.
- **LVL** : The currently programmed level.
- **BOOTLOADER** : The boot loader version currently on your device.
- **FIRMWARE** : The firmware version currently on your device.

- **CALIBRATION**: The calibration version currently on your device
- **SERIAL NUMBER** : The serial number assigned to your device

## PROGRAMMING ERRORS --UPDATE REQUIRED--

Fusion is designed to help the development team at Superchips support new vehicle calibrations.

When you connect your device to the vehicle, the first step it takes is identifying your vehicle's stock file.

If the stock file isn't currently supported:

1. The device will display a screen alerting you that the **stock file is not yet supported**.
2. It will then prompt you to **press a button** in order to read and save the stock file.
3. Once the device has saved the stock calibration, it will prompt you to **connect the device to Fusion**.
4. Fusion will ask you if you want to upload your vehicle's stock files to our server. Choosing **Yes** will upload the files to the server, and alert the devel-

opment team. This will help the development team provide support for your vehicle's calibration as quickly as possible.

### **--NON-STOCK CONDITION--**

During programming, the device will read the stock file on your vehicle and compare it to a corresponding stock file that has been verified by Superchips. If there is a **mismatch**, the device will alert you, and display the following message:

***“ Non-stock condition detected. This is most likely because your vehicle has been programmed with a competitive product. It is recommended that you return your vehicle to a stock condition with the product that changed it. Alternatively, you can plug your device into your computer and it will load the necessary files onto your device to return your vehicle to stock.”***

If you don't have the competitive product that programmed your vehicle:

**1. Connect the device to Fusion** (via USB connector) where you'll be prompted to download the correct stock files.

**2.** Once downloaded, simply connect the device to your vehicle (via OBDII), and the device will program the verified stock files to your vehicle.



**T I P S**

Tip: Programming your vehicle may expose existing defects in your PCM that could disable your vehicle. It is advised that you do not program in remote locations in case of failure. Vehicle manufacturers do not recommend programming in extreme temperature. Please see your vehicle service manual to ensure that programming is being done in accordance to the original equipment manufacturers specifications.

Tip: Keep in mind that the SCR is a high performance product and that not all vehicles deliver the exact same power output when programmed with the SCR. It is recommended that you select a program that will best fit your needs. Keep in mind the condition and tolerances of your vehicle when selecting a suitable power level.

Tip: If any problems persist, contact Superchips Technical Support. Please have the product Serial Number and Vehicle Information prior to calling Technical Support. This will help ensure quick and accurate support.

Tip: When taking your vehicle to the dealership to get the oil changed or to get other work done, it is always a good idea to program the vehicle to stock before taking it in for service. In many cases, the dealership has new updates for the vehicle, and consequently will update the vehicle's computer. If the vehicle is programmed to a power level, the dealership update will over write the programming and lock the device. Always program the vehicle to stock, and update the product on Fusion while it is out of the vehicle to ensure that the software on the SCR is up to date with the software the dealer installs in the vehicle.

TROUBLE - SHOOTING

TROUBLE SHOOTING GUIDE		
SYMPTOM	POSSIBLE CAUSE	SOLUTION
Display beeps for two seconds (long beep)	The unit is too hot from being in the direct sunlight	Once the device cools down the screen will turn itself on
No display when the key is in “on” position	The unit will not wake up with the key in the “on” position until any button is pressed	Touch the screen or start the vehicle, if this does not turn the screen on then you will need to call technical support
Vehicle does not start after programming	The calibration may have not written correctly	Select “Return to stock” from the programming menu. Then, Program back to stock. Now, try to start the vehicle again. If the problem continues contact tech support
Fusion drivers will not install correctly	The drivers were not successfully installed by the automatic installer	Manually install the drivers, technical support can provide you with instruction on how to do this
Display beeps quickly	Possible device malfunction	Update the device using the fusion software
Unit will not power on after vehicle is started or after screen or buttons are pressed	Typically this issue is caused by a blown OBDII/Cigarette Lighter Fuse	Replace fuse and test unit again
<p>Programming errors:</p> <p>1. Your device gets stuck on the “Uploading Bootloader” screen</p> <p>2. An error is displayed: “ERROR-We could no upload the bootloader to the vehicle...”</p> <p>3. If you are constantly asked to make sure your key is on.</p> <p>4. Error displayed after your device shows blank gauges and says that it is loading. The error will be displayed as “Cannot communicate with vehicle, ensure the key is in the on position...”</p>	<p>Sometimes programming can be disrupted by installed aftermarket devices that are tapped into the vehicle communication lines. These may include but are not limited to aftermarket radios, chime boxes, remote starters, ect.</p> <p>Also, any power consuming devices should not be plugged into the cigarette adapter during the programming process. Fluctuations in power may disrupt the programming process.</p>	<p>The following solutions are good first steps to getting around these programming errors. If these steps do not solve your problem, please contact Tech Support:</p> <p><b>Fuses:</b> (<i>CAUTION: Always turn the key off while unplugging fuses</i>).</p> <p>1. Remove fuses connecting radio, radio amplifier, satellite radio, remote starter, or any other aftermarket device you have installed on your vehicle.</p> <p><b>Power:</b></p> <p>1. Close all doors during programming.</p> <p>2. Do not operate electrical accessories (radio, windows, wipers, ect.)</p> <p>3. Remove any devices plugged into the cigarette lighter or any other auxiliary power port.</p>

## COMMONLY USED ACRONYMS

ACT = Air Charge Temp  
 ACV = Air Control Sensor  
 AOD = Automatic Overdrive Transmission  
 APP = Accelerator Petal Position  
 BAT = Battery Voltage  
 BCM = Body Control Module  
 BOO = Brake On/Off Switch  
 BP = Barometric Pressure Sensor  
 CCD = Computer Controlled Dwell  
 CCO = Converter Clutch Override  
 CDR = Crankcase Depression Regulator  
 CEL = Check Engine Light  
 CFI = Central Fuel Injection  
 CHT = Cylinder Head Temperature  
 CID = Cylinder Identification Sensor  
 CKP = Crank Position Sensor  
 CMP = Cam Position Sensor  
 CPS = Crankshaft Position Sensor  
 DTC = Diagnostic Trouble Codes  
 EAS= Expandable Accessory System  
 ECA = Electronic Control Assembly  
 ECM = Electronic Control Module  
 ECT = Engine Coolant Temp  
 EDF = Electric Drive Fan Relay  
 EDIS = Electronic Distributor  
 EGO = Exhaust Gas Oxygen Sensor  
 EGR = Exhaust Gas Recirculation  
 EOT = Engine Oil Temperature  
 EVP = EGR Position Sensor  
 EVR = EGR Valve Regulator  
 FDM = Fuel Delivery Module  
 FPM = Fuel Pump Monitor  
 FRP = Fuel Rail Pressure  
 HEGO = Heated Exhaust Gas Sensor  
 IAT = Intake Air Temperature  
 ICM = Integrated Controller Module  
 IDM = Ignition Driver Module  
 ISC = Idle Speed Control  
 ITS = Idle Tracking Switch  
 IVS = Idle Validation Switch (Diesel)  
 KAM = Keep Alive Memory  
 KOEO = Key On Engine Off  
 KOER = Key On Engine Running  
 KS = Knock Sensor  
 LOAD = Engine Load  
 LOS = Limited Operation Strategy  
 LPD = Line Pressure Desired  
 LUS = Lock-up Solenoid  
 MAF = Mass Airflow  
 MAFV = Mass Airflow Sensor Voltage  
 MAP = Manifold Absolute Pressure  
 MAT = Manifold Air Temp  
 MCU = Microprocessor Control Unit

MIL = Malfunction Indicator Light  
 MPH = Miles Per Hour  
 OHC = Over Head Camshaft  
 OSS = Output Shaft Speed  
 PCM = Powertrain Control Module  
 PIP = Profile Ignition Pickup  
 PSPS = Power Steering Pressure Switch  
 RPM = Revolutions Per Minute  
 SES = Service Engine Soon  
 SIL = Shift Indicator Light  
 SPARK = Spark Advance/Retard  
 SPOUT = Spark Output Signal  
 STAR = Self Test Automatic Readout  
 TAPS = Throttle Angle Position Sensor  
 TCM = Transmission Control Module  
 TFI = Thick Film Ignition System  
 TFT = Transmission Fluid Temperature  
 TGS = Top Gear Switch  
 TPS = Throttle Position Sensor  
 TQC = Torque Control  
 TSS = Turbine Shaft Speed  
 TTS = Transmission Temperature Switch  
 VAF = Vane Air Flow Sensor  
 VAT = Vane Air Temperature  
 VCT = Variable Cam Timing  
 VSS = Vehicle Speed Sensor  
 WAC = WOT A/C Cut-off Switch  
 WOT = Wide Open Throttle



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